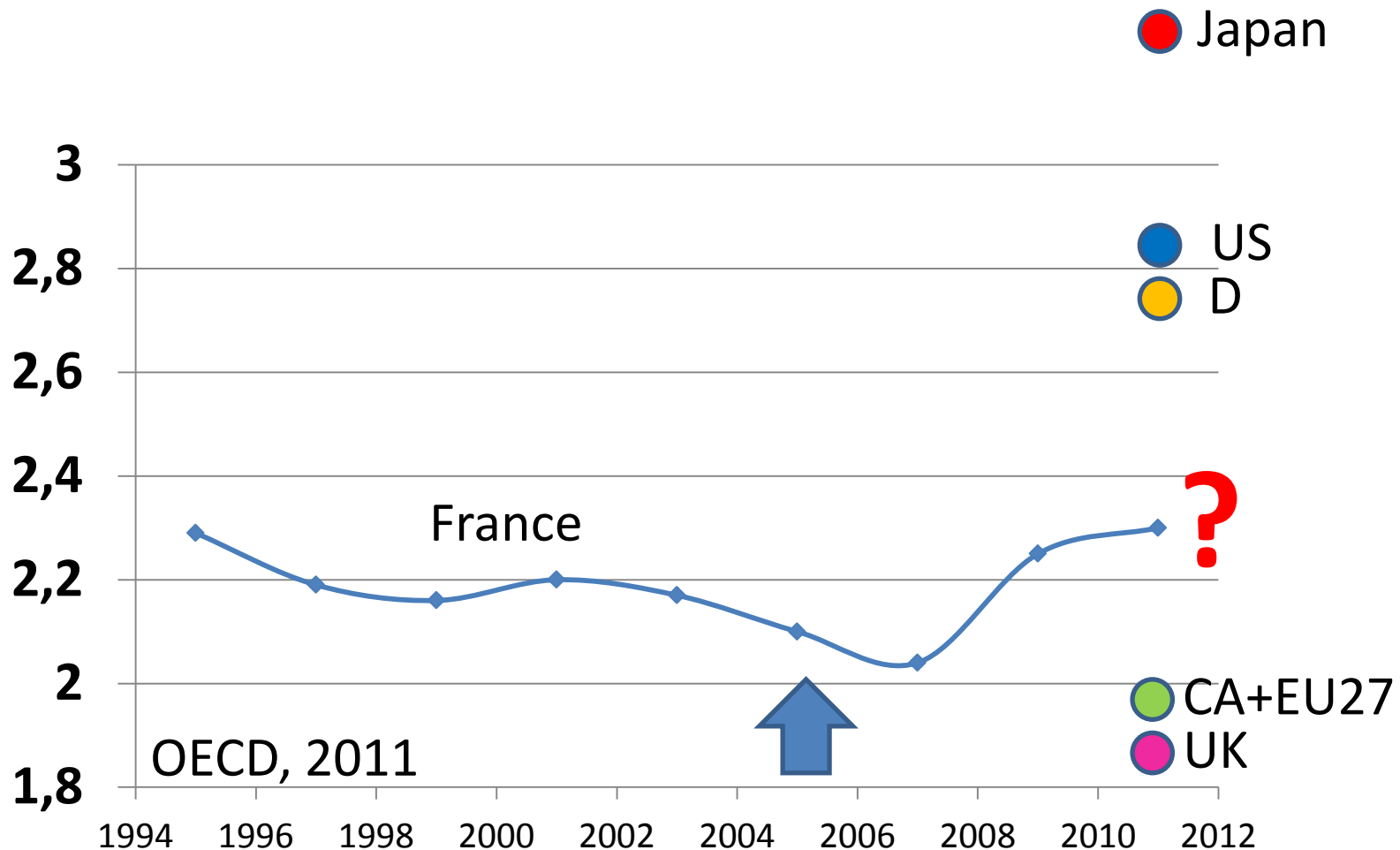


Recent trends on French Science Policy

How ANR faced budget changes

Philippe Freyssinet & Charline Avenel

% Domestic R&D expenditure / GDP

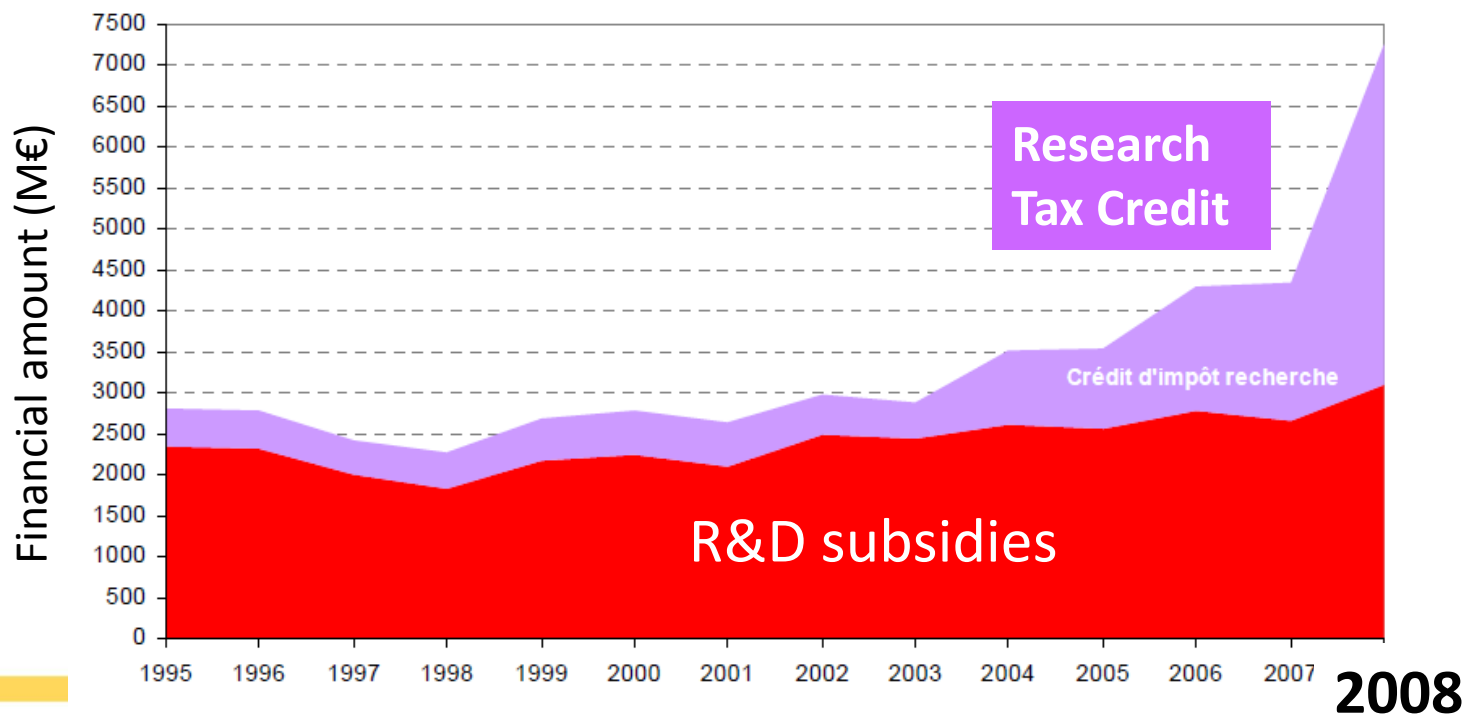


2006-2010 : a set of political reforms

- **Institutional reforms**
- **2006 « *Pacte pour la Recherche* »**
 - Creation of ANR (research funding agency) + 0.8Bln€
 - Creation of OSEO (innovation support to SMEs)
 - Creation of « competitiveness clusters » + dedicated fund (0.5Bln€)
- **2007 – « *Loi relative aux libertés et responsabilités des universités* »**
 - Autonomy of the 83 public universities > Jan. 2012

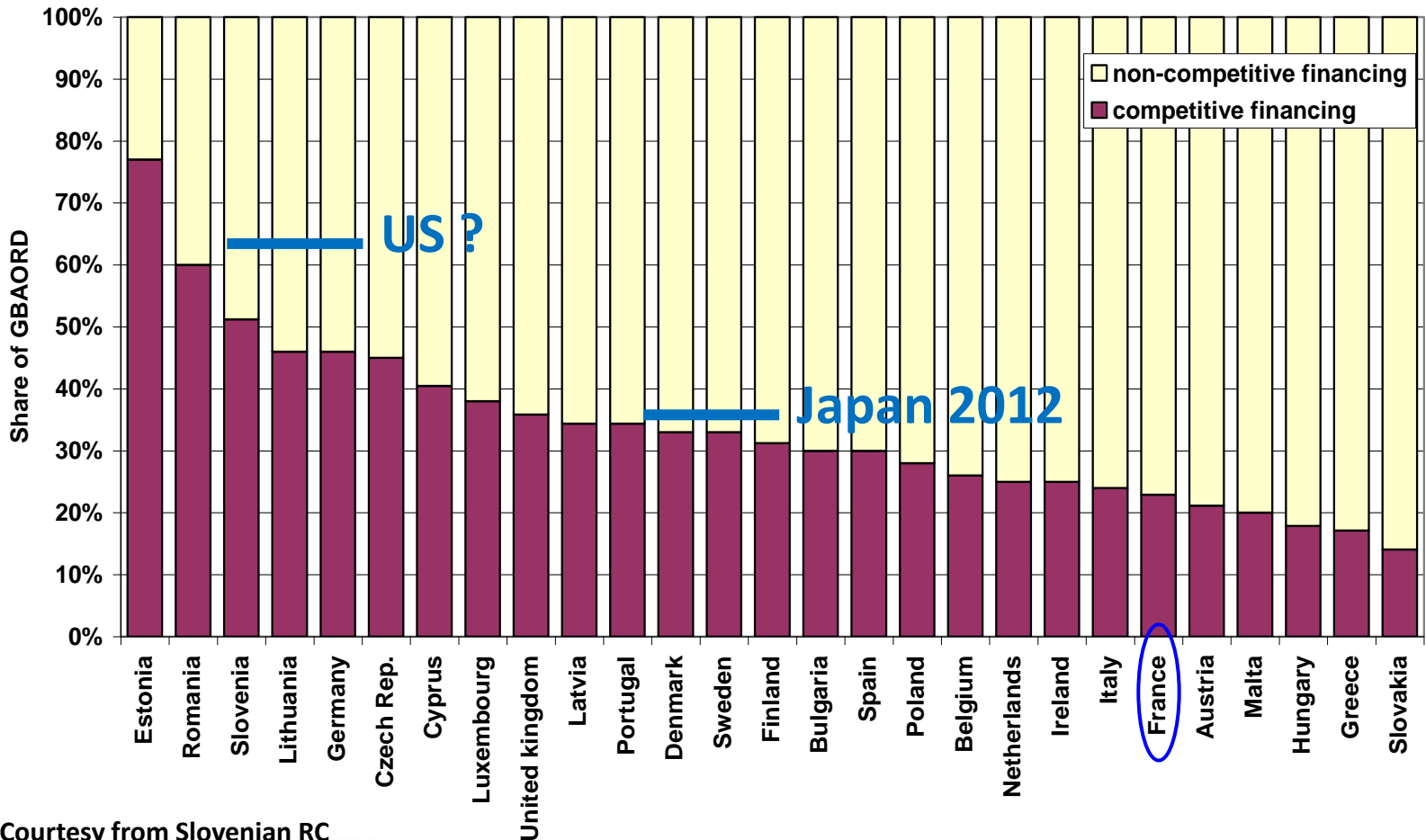
2006-2010 : a set of political reforms

- 2008 : Increase x3 of the « Research Tax Credit »
- >> significant cost reduction for private R&D in France



Competitive vs. Non-competitive Funding

Share of competitive financing in total public R&D expenditure in EU27



Courtesy from Slovenian RC

Source: ERA-WATCH (2007, 2008)

2010 : Investments for the future

A new approach
to funding R&D
policies

A National Loan of 35 Bln €, of which 22 Bln €
for Research and Higher Education
Endowment : 15-30 % granted, and distribution of interests (3.4%) over 10 years

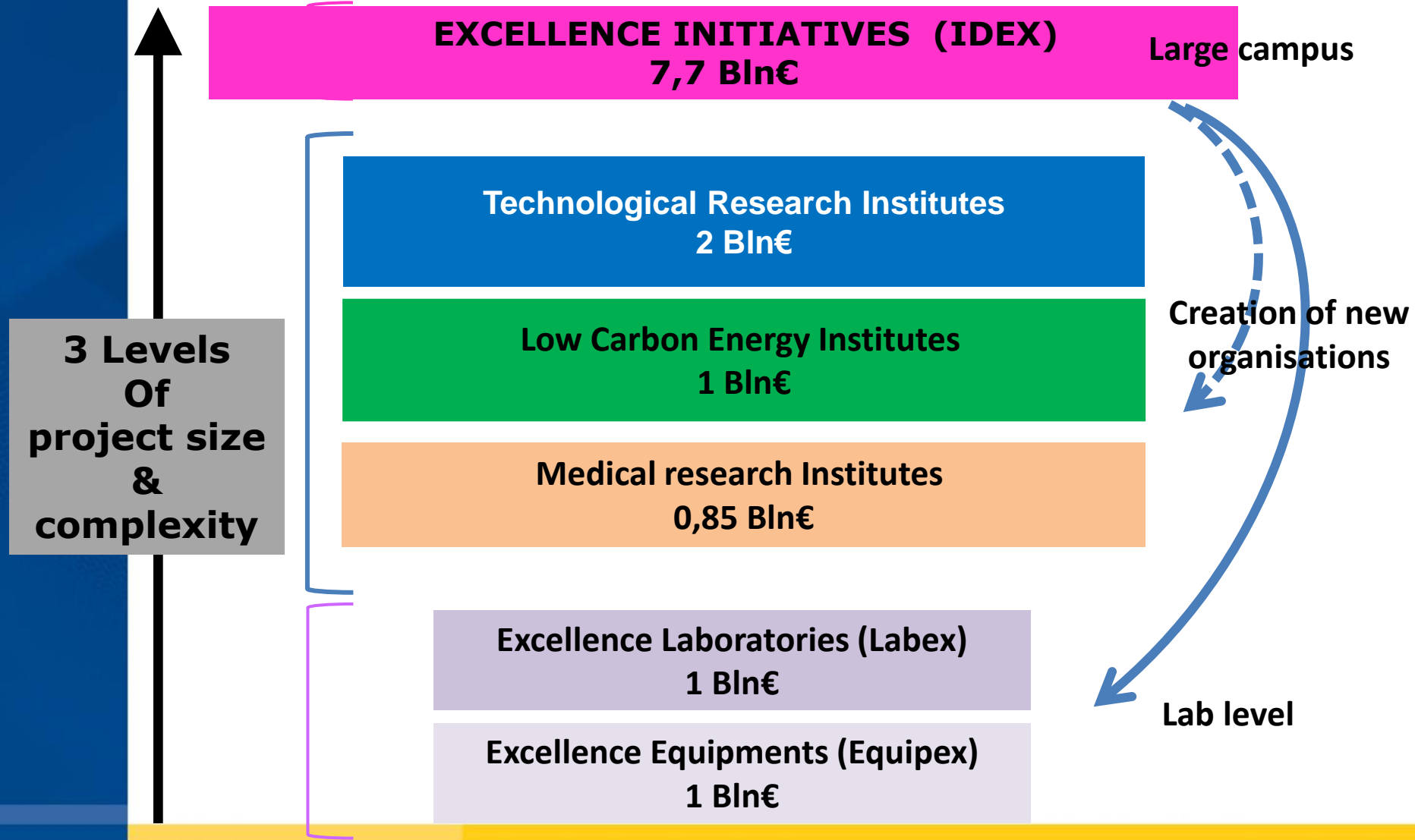
A bottom up
policy

... For the first time in France, competitive
calls concerned large equipments, but
mostly creation of new organisations
- No targeted calls

Important
funding

Very large projects from X0 M€ to X00 M€

A set of interconnected instruments



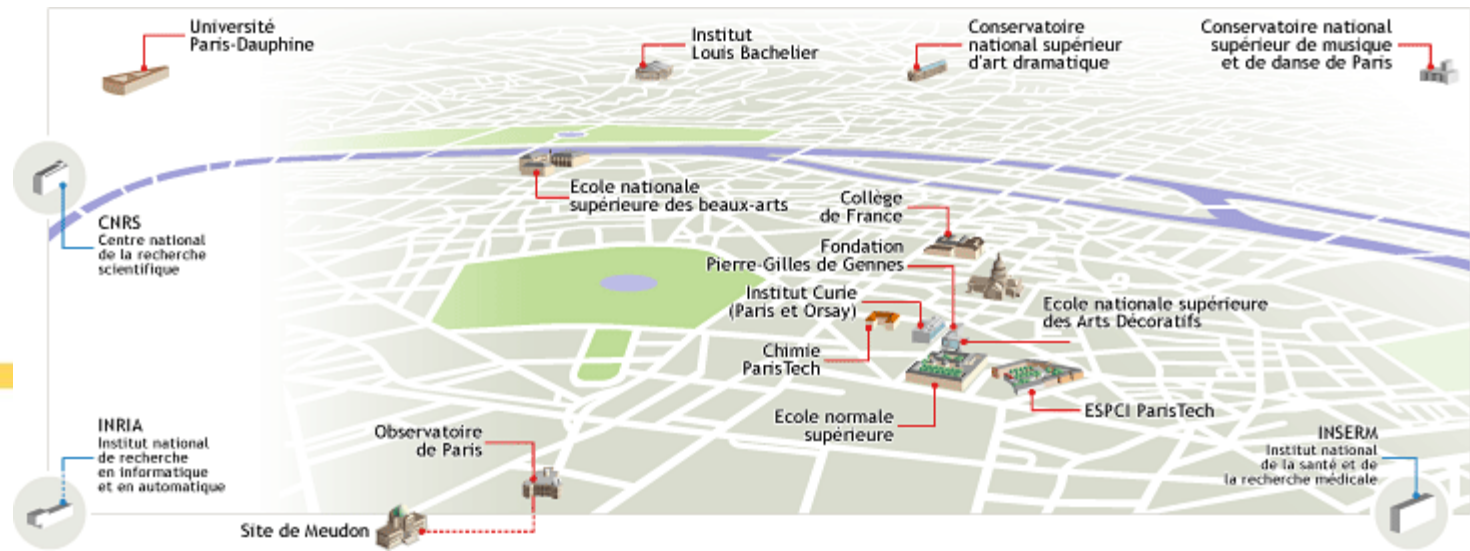


Funding
750M€

16 institutions in partnership
14 000 étudiants (>70% Master degree)
2 Nobel price, **4** Fields Medals, **4** CNRS gold medal

Objective : to create a large research university within the heart of Paris

Strongly multi-disciplinary



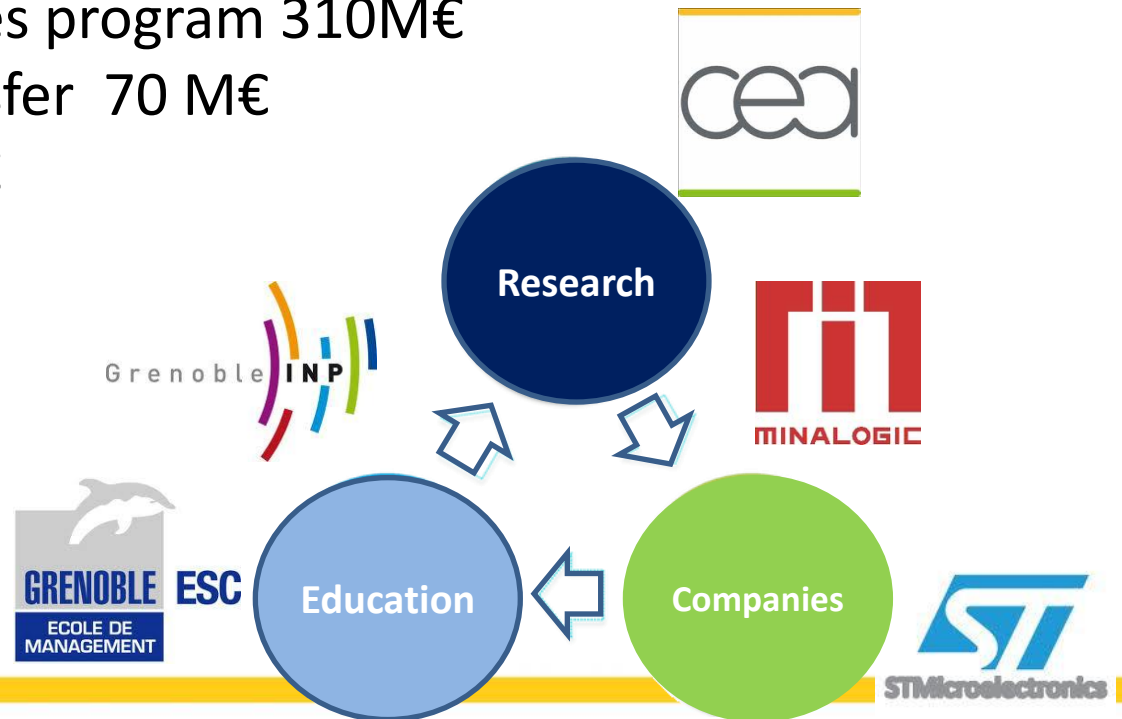
NanoElec – A T.R.I. on nanotechnologies

An investment of 460 M€/ 10yrs

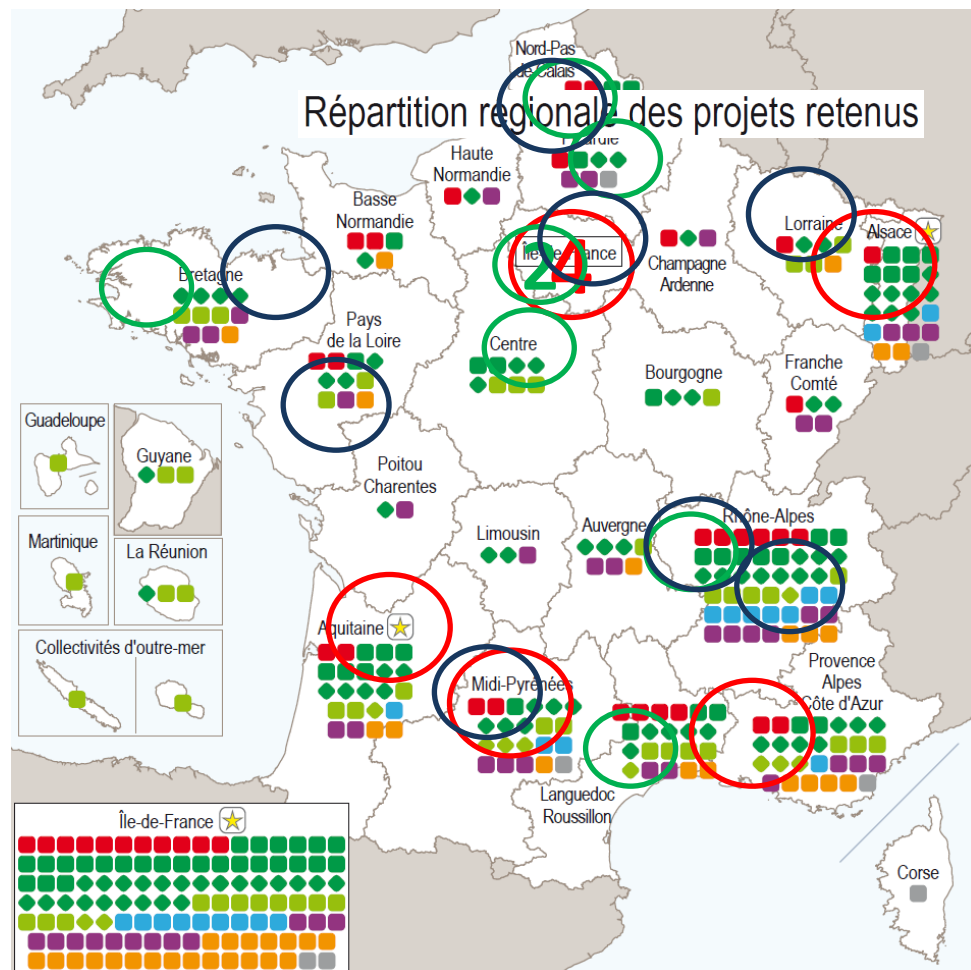
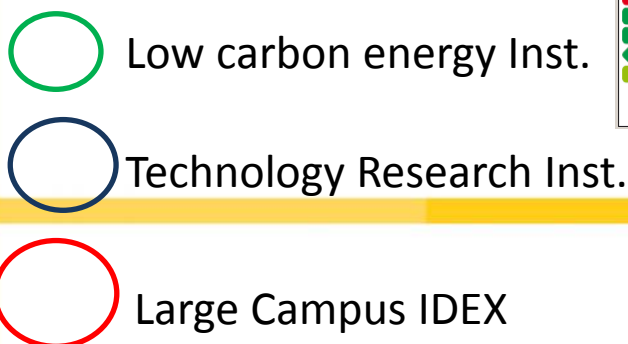
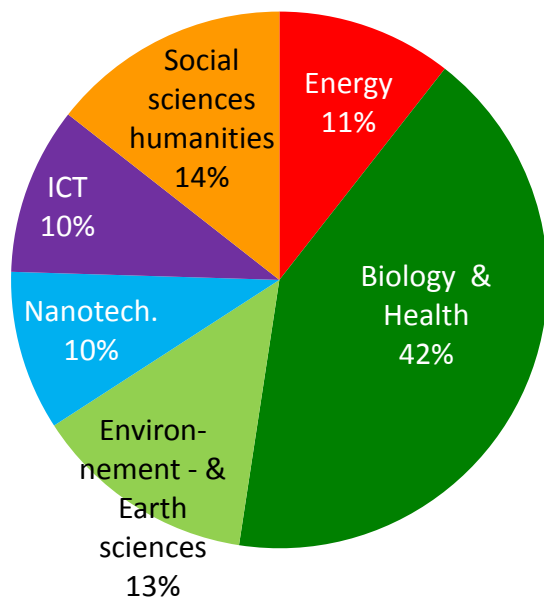
50% investment from private sector

3 major programs

- Core technologies program 310M€
- Technology transfer 70 M€
- Education 50M€



The outcomes of the selection process



- Projets thématiques d'excellence
 - Biotechnologies et bioressources
 - Bioinformatique
 - Démonstrateurs préindustriels en biotechnologie
 - Infrastructures nationales en biologie-santé
 - Nanobiotechnologies
 - Cohortes
 - Instituts d'excellence sur les énergies décarbonnées
 - Action espace

- Initiatives d'Excellence - IDEX
- Pôles d'excellence
 - Équipements d'excellence – EQUIPEX
 - Laboratoires d'excellence – LABEX
 - Instituts hospitalo-universitaires – IHU
 - Projets prometteurs hospitalo-universitaires
 - Instituts de recherche technologique – IRT
 - Société d'accélération du transfert de technologie – SAT

What lessons do we draw from that ?

- A public policy largely based on a bottom up process, without political influence in the selection process
- A relatively fast process compared to conventional top-down reforms
 - Sometimes considered too fast to build up comprehensive and well balanced projects
- Priority given to project excellence (and not to planning)
 - The process provided a good picture of today's excellence in France

What lessons do we draw from that ?

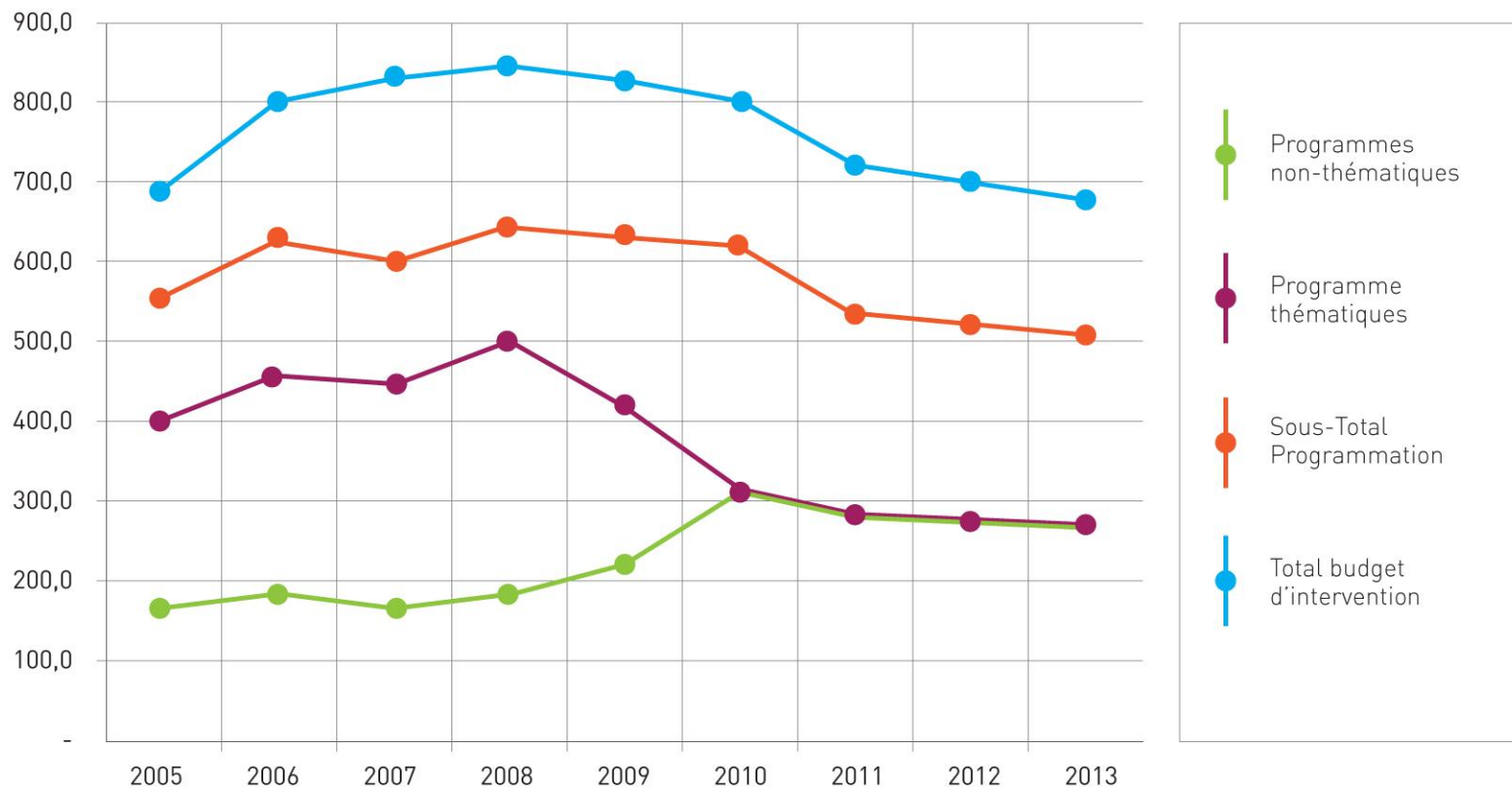
- A tremendous effort of the management of research institutions to submit original proposals
 - It raised unexpected and creative partnerships at high level (i.e. Paris Region)
 - It forced to build up new regional coherent strategies (this was a key evaluation criteria)

What's next ?

- Will we observe a « compensation process » in favor of those who were not funded ?
 - Steering effect by association with funded partners
 - Or an increase of the contrast between winners and losers ?
- Will that fast and competitive process generate severe weaknesses in the projects (governance, complexity, lack of real willingness...) ?
 - Program monitoring is crucial
- Will the dynamics of the competitive process survive to bureaucracy ?

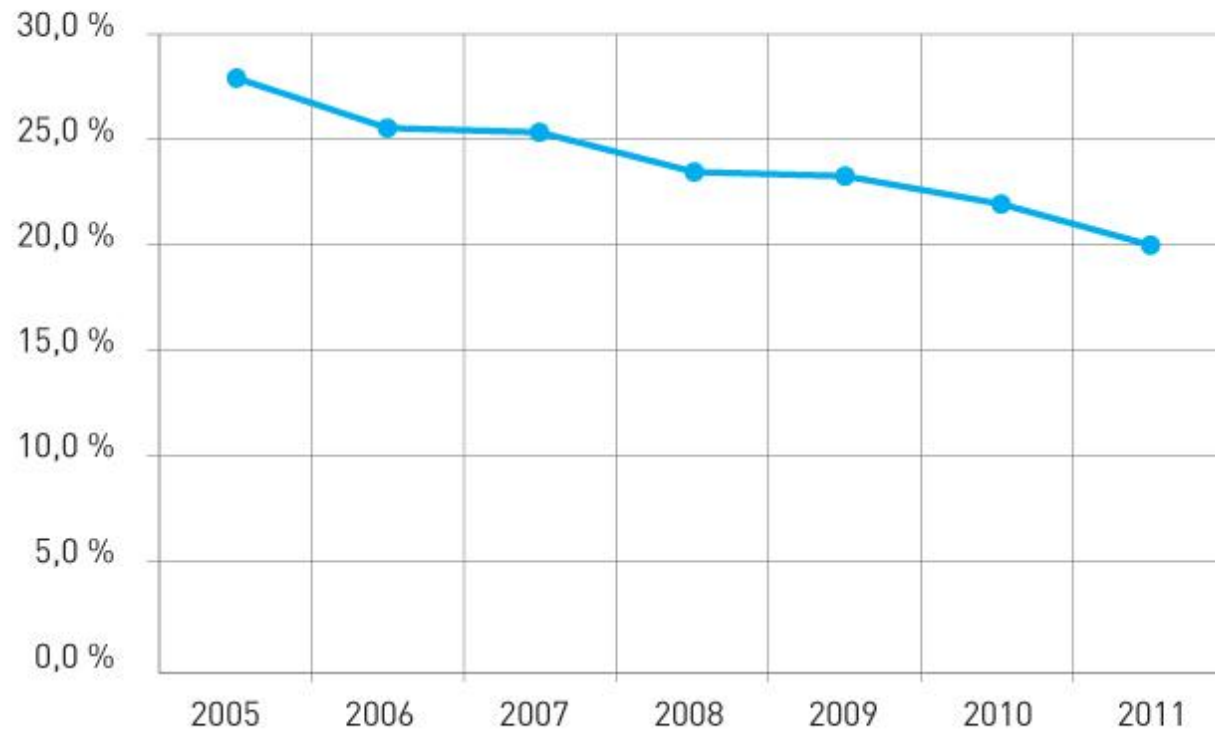
Regular grants faced austerity since 2009

Evolution 2005–2013 budgets



Evolution des budgets d'intervention de l'ANR (en M€)

Impact of budget cuts 2005-2011



Impacts of austerity on a short term basis

- Despite the budget cuts, the average grants were preserved
 - Impact on success rate (less projects)
- Less calls issued on targeted programs
 - >Slow down on some priorities
- With a low success rate, the merit review process loses reliability and may favor fraud

Austerity on a longer period ?

- Different scenarios possible
- A policy to preserve competitiveness and foster a way out to the crisis
 - Target on key programs / Decline on support to basic research
 - Favor ppp and support to clusters
 - Favor maturation
- Reduce project funding and capitalize on the projects of the « investments for the future »

Thank you for your attention !